The opinion in support of the decision being entered today was <u>not</u> written for publication and is not binding precedent of the Board.

Paper No. 24

### UNITED STATES PATENT AND TRADEMARK OFFICE

## BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte BRIAN DALE ROSS, LAUREN DANIEL STEGMAN and ALNAWAZ REHEMTULLA

**MAILED** 

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U.S. PATENT AND TRADEMARK OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES

Appeal No. 2004-2184 Application No. 09/545,316

ON BRIEF

Before THOMAS, KRASS, and NAPPI, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

## **DECISION ON APPEAL**

This is a decision on appeal from the final rejection of claims 1, 3-6, 8-12, 15, 16, 19, 20, 23, and 24, all of the pending claims.

The invention pertains to on-line publishing. More particularly, a computer implemented method for peer review of articles is described and claimed.

Representative independent claim 1 is reproduced as follows:

1. A computer implemented method for peer review over a communications network, comprising:

receiving an article from an author via a communications network;

extracting context information from the article;

querying a database containing profiles of potential reviewers to determine a qualified reviewer based on the extracted context information;

assigning the qualified reviewer to the article;

providing an evaluation form to the reviewer;

receiving a completed evaluation form from the reviewer;

providing the completed evaluation form to the author;

receiving a response from the author directly in the completed evaluation form:

providing the completed evaluation form with author responses to an editor;

receiving a publication decision from the editor; and providing the publication decision to the author and the reviewer.

The examiner relies on the following references:

| Borovov et al. (Borovov) | 5,873,107 | Feb. 16, 1999         |
|--------------------------|-----------|-----------------------|
| Walker et al. (Walker)   | 5,862,223 | Jan. 19, 1999         |
| Kao et al. (Kao)         | 6,070,177 | May 30, 2000          |
|                          |           | (Filed Mar. 06, 1998) |

Sato et al. (Sato)

6,212,517

Apr. 03, 2001

(Filed Jun. 30, 1998)

Maddison et al., (Maddison) "Peer review", copyright 1998, pages 1-3.

Pope et al., (Pope) "Using the web for peer review and publication of scientific journals", Conservation Ecology, September 1998, pages 1-10.

Mathews et al., (Mathews) "Electronic Management of the Peer Review Process", <u>Fifth</u> <u>International World Wide Web Conference</u>, May 6-10, 1996, pages 1-21,

Sumner et al., (Sumner) "Open Peer Review & Argumentation: Loosening the Paper Chains on Journals" Research Elsewhere, September 1996, page I -I0.

Claims 1, 3-6, 8-12, 15, 16, 19, 20, 23, and 24 stand rejected under 35 U.S.C. §103. As evidence of obviousness, the examiner offers Maddison, Pope, Kao, Mathews, Sumner, Walker, and Borovoy with regard to claims 1, 3, 5, 6, 8-12, 15, 19, 20, 23, and 24, adding Sato to this combination with regard to claims 4 and 16.

Reference is made to the brief and answer for the respective positions of appellants and the examiner.

#### OPINION

With regard to the independent claims, the examiner employs Maddison for the general teaching of an on-line publishing method whereby a reviewer is assigned to review an article based on the reviewer's expertise and the subject of the article, and the reviewer completes an evaluation form and passes it on to the author. The author

may then respond to the evaluation and such response would be provided to an editor (Maddison-page 3) and the editor would decide whether to publish the article.

The examiner contends that Maddison does not "explicitly" teach receiving an article from an author via a communication network, querying a database of potential reviewers to determine a qualified reviewer, receiving a response from the author directly in the completed evaluation form, providing the completed evaluation form with author responses to the editor, and providing the publication decision to the author and the reviewer.

The examiner then turns to Pope, at page 2, lines 28-31, for a teaching of an author using a communication network to submit an article to a journal. Taken together with Maddison's disclosure of "[r]eviews are usually conducted on-line" (page 2-line 35), Pope's disclosure of making "it possible to conduct the entire peer-review process on-line" (page 1-lines 6-7), the examiner concludes that the skilled artisan would have found it obvious to combine these teachings and conduct a peer-review process on-line wherein an author sends an article over a communication network. We agree.

The examiner contends that Pope does not "explicitly" disclose the steps of querying a database of potential reviewers to determine a qualified reviewer, receiving a response from the author directly in the completed evaluation form, providing the

completed evaluation form, with author responses, to an editor, and providing the publication decision to the author and reviewer.

The examiner then turns to Mathews for providing, in a peer review process, an evaluation form to a reviewer (page 3, lines 33-35; page 7, lines 22-33); receiving a completed evaluation form from the reviewer (page 3, lines 33-35; page 7, lines 22-33); providing the completed evaluation form to the author (same pages/lines); and providing the publication decision to the author and the reviewer (page 8, lines 25-37). The examiner combines Mathews with the Maddison/Pope combination "to provide the announcement of the result for the authors as well as the reviewers, since in the business practice, both the reviewers and the authors are people who expect the result" (answer-page 7).

But, the examiner contends, Mathews does not "explicitly" disclose the steps of querying a database of potential reviewers to determine a qualified reviewer, receiving a response from the author directly in the completed evaluation form, and providing the completed evaluation with author responses to an editor. The examiner turns to Kao, said to teach a form transmitted among several users to review, the form including comments which are entered directly into the form, citing column 5, lines 8-10, and column 6, lines 17-40, and Figure 4).

The examiner finds that it would have been obvious to combine Kao with the Maddison/Pope/Mathews combination "to allow the author responses to the reviewers evaluation form directly in the completed evaluation form and providing the completed evaluation with author responses to an editor to facilitate the peer review process, since this would have helped the reviewers, authors, and editor are able to use the evaluation form to communicate to each other in peer review conducted on-line" (answer-page 7, lines 12-16).

The examiner states that Kao does not "explicitly" disclose the steps of querying a database of potential reviewers to determine a qualified reviewer, so the examiner turns to Sumner, contending that Sumner teaches that "automated systems are in place for matching reviewers with submissions based on keyword analysis" (page 2, lines 7-8, of Sumner) and that "the editor then decides whether the article should be accepted...for publication with the final article" (page 7, line 13-page 8, line 2, of Sumner). The examiner finds that it would have been obvious to combine Sumner with the Maddison/Pope/Mathews/Kao combination "to provide an automated system to determine a qualified reviewer for an article based on keywork (sic, keyword?) analysis, since this would have facilitate (sic, facilitated) the peer review process" (answer-page 8, lines 2-4).

The examiner recognizes that Sumner still did not provide for the step of querying a database of potential reviewers to determine a qualified reviewer, so the examiner relies on Walker for such a step, referring to column 7, lines 32-61, thereof. The examiner finds that it would have been obvious to combine Walker's search program to identify qualified experts with the Maddison/Pope/Mathews/Kao/Sumner combination to find a qualified reviewer to review the article in view of Walker's disclosure of "a simple way for users to find qualified experts to give them professional advice" (Walker-column 7, lines 1-5).

Finally, the examiner contends that Borovoy teaches the extraction of context information from the article and the querying of a database based on the extracted context information, concluding that it would have been obvious to combine Borovoy's teachings with the Maddison/Pope/Mathews/Kao/Sumner/Walker combination since the provision of a query of a database for potential reviewers based on context information extracted from the article "would have facilitated queries for potential reviewers in the peer review process" (answer, page17).

Despite having to rely on no less than seven references, we find that the examiner presents a convincing case of obviousness regarding the instant claimed subject matter of at least the independent claims.

Appellants argue that Maddison is silent with respect to teaching that the completed evaluation form is provided to the author because the express teachings of Maddison only state that the reviewer comments are passed along to the author.

A reference must be evaluated not only for its specific teachings but also for reasonable inferences which one skilled in the art would draw therefrom. In re

Shepard, 319 F.2d 194, 197, 138 USPQ 148, 150 (CCPA 1963). In the instant case, since Maddison reveals that reviews relate to individual sections of a contribution and they are typed into windows of a structured evaluation form, and that these reviews are then "passed along to the authors," there is a strong inference that a completed evaluation form is provided to the author. At worst, the artisan clearly would have found it obvious, from these teachings of Maddison, taken together with the suggestion of Pope of conducting the entire peer review process on-line, and Mathews' suggestion, at page 8, to gather evaluations and electronically mail out letters of rejection/acceptance to e-mail addresses of authors, to send a completed evaluation form to the author.

Moreover, as postulated by the examiner, since Maddison teaches reviews related to individual sections of a contribution and typed into windows of a structured evaluation form, which are passed along to the author, if the "completed" evaluation

form is not passed along to the author, the structure of the reviews would differ and the author would be confused as to the sections to which the reviews (comments) belong (see answer-page 25). Appellants offer no response.

Appellants next argue that Maddison does not provide the completed evaluation form with author responses to an editor. Clearly, at page 3 of Maddison, it is disclosed that authors' responses are sent to the editor. As to whether these responses are included in a "completed evaluation form," the examiner agreed that Maddison does not explicitly disclose this. That is why the examiner relies on Kao to show the obviousness of sending complete forms between users on-line in order to review comments which are entered directly on the form. When taken together with the teachings of Maddison/Pope/Mathews, the artisan would have been led, by Kao, to provide the entire evaluation form in communication between reviewer/author/editor in the peer review process.

Appellants argue, at page 10 of the brief, that Mathews expressly states that modification comments, and scores are "mailed to the author" but does not suggest that private comments are mailed to the author. Clearly, with the suggestion in the prior art of mailing to an author comments in a review process, the artisan would have found it obvious to mail to the author any other item of interest, including private comments by

reviewers. Even if, <u>arguendo</u>, the prior art does not disclose mailing such comments to an author, we find nothing unobvious about choosing to send or not send certain comments or parts of a form. We do not think that appellants are suggesting that there is patentable subject matter in choosing to transmit or to retain certain information to a certain party, to the exclusion of other information, when the prior art clearly teaches the transmission of information to that party.

Appellants further argue that Kao, being directed to an audit history for a database form, would not be properly combinable with the other references (see page 12 of the brief). We do not find this argument persuasive of nonobviousness. We agree with the examiner that since Kao teaches a method for passing an on-line form along to different users in order to facilitate communications among them, such communications including approvals, comments, etc., the artisan would have found such a teaching applicable to other on-line communication, such as the peer review methods described by the Maddison, Pope, Sumner and Mathews references, for example.

Appellants argue dependent claim 6 separately, because it introduces the concepts of formatting the article into a standard format and then presenting the reformatted article to the author for approval. Appellants argue that the advantages of

a standard format and a quality review by the author prior to sending the article to a reviewer are numerous, including the assurance that the article is ultimately provided to a reviewer and ultimately an editor is presented as the author intends and in the format that the reviewer or editor expects. Appellants point out that reformatting into a standard format is not trivial because formatting errors can occur such as the decoupling of text and figures.

Appellants take issue with the examiner's reliance on Pope, page 7, lines 7-9, and page 5, for the limitations of claim 6. Appellants state that the examiner acknowledges that Pope does not expressly teach this limitation of presenting reformatted articles to the author for approval but that the examiner contends that it would have been obvious to present the reformatted article to the author for approval since the final version of the article is presented to the author. It is appellants' position that this reasoning amounts to impermissible hindsight gleaned from appellants' own teachings.

The examiner's response is to point to the "automated submission module" paragraph at page 3 of Pope, wherein software reformats the submitted article into a standard HTML format at a password-protected review site. Then, at page 7 of Pope, it is disclosed that when a final version is created, the author is contacted to approve online proofs "still at the password protected review site." Accordingly, it seems reasonable that since an article is reformatted into a standard HTML format at a site

which is at the same site that the author will be contacted to approve the final version, the author must be presented with a reformatted article, as required by claim 6.

Appellants offer no response to this reasoning by the examiner.

With regard to claim 9, and claims 10-12, 15, 19, 20, 23, and 24, dependent therefrom, appellants set forth, at pages 14-21 of the brief, the same arguments employed for instant claim 1. For the reasons <u>supra</u>, we are not persuaded by these arguments.

Regarding claims 11 and 12, appellants argue that these claims introduce the concept of allowing a reviewer to gain access to reviews of the same article that were completed by other co-reviewers and that this is advantageous since it raises the experience level of reviewers by exposure to reviews of the same article.

It is appellants' position that Mathews does not disclose a reviewer gaining access to other completed evaluation forms after submitting an evaluation form for the same article and that the examiner erroneously maintains that it would have been obvious to do so to provide an honest evaluation since examining other completed evaluation forms for the same article before reviewing the article and submitting it would have influenced the reviewer's point of view in the evaluation process.

The examiner refers to page 8 of Mathews, lines 25-30, for the proposition that after submitting evaluations, all reviewers can examine a report based on the

evaluations and that this suggests that a reviewer can examine other reviewers' evaluations.

We disagree with the examiner as to claims 11 and 12. Merely because Mathews discloses that all reviewers can examine a report of the decisions to accept or reject papers based on evaluations, this does not suggest, in our view, that the reviewers can examiner other reviewers' evaluations. Thus, the claim limitation of qualified reviewers having access to completed evaluation forms of other qualified reviewers after submitting an evaluation form for the same article is not suggested by Mathews. Since the examiner has not convinced us of the obviousness of the subject matter of instant claims 11 and 12, we will not sustain the rejection of these claims under 35 U.S.C. §103.

As to claim 4, appellants argue that this claim requires that upon receipt of an article from an author, a ranked list of keywords related to the article is generated, the ranked list is provided to the author, and the author approves the ranked list of keywords. It is argued that this is advantageous because it allows the author a measure of quality control over the process for deriving keywords from the article, and indirectly allows a measure of quality control of the assignment of reviewers for the article.

It is appellants' position that the examiner is wrong in contending that the subject matter of claim 4 would have been obvious because presenting the ranked list of keywords to the author is the same as presenting the final version of the article to the author, the latter being taught by Pope at page 7, lines 7-9.

We will sustain the examiner's rejection of claim 4 because appellants' arguments are not complete. While appellants argue the deficiencies of Pope in teaching the specific limitations of claim 4, we note that the examiner specifically relied on Sato for these limitations, contending that it would have been obvious to combine the references to provide keyword information to the author, as in Sato, since Pope already teaches the creation of keywords for use in messages to authors, at page 3, lines 23-24.

While a convincing argument for unobviousness could possibly have been made, appellants simply have not made it since they do not even address the Sato reference in their arguments regarding claim 4, at pages 22-23 of the brief.

Accordingly, we will sustain the rejection of claim 4 based on a lack of showing, by appellants, of any error in the examiner's rationale.

Turning, finally, to claim 16, appellants contend that this claim further limits the searching of the database step of claim 9 and requires that the title and text of the

article are parsed to generate a list of keywords, that the list of keywords is ranked according to their relative weight in describing the content of the article, and that the database is searched to generate a list of qualified reviewers. Appellants contend that the examiner's reliance on Sumner, at page 2, lines 4-9, is misplaced because that portion of Sumner teaches that automated systems are in place for matching reviewers with submissions based on keyword analysis, but Sumner does not indicate how the keywords are generated or that they are generated by parsing the title and text of the article, as required by claim 16.

While we agree that Sumner does not specifically suggest the particular steps of claim 16, it does disclose the matching of reviewers with submissions based on keyword analysis, and the examiner then employs Sato's teaching of generating a ranking list according to relative weight in a selected document to combine with the Sumner teaching, finding that the combined teachings "highly suggest that the keywords are generated from the text of article (body) and title" (answer-page 33).

Since we have no response from appellants, as appellants do not address the Sato teachings in their argument at pages 23-24 of the brief, and we find the examiner's rationale reasonable on its face, we will sustain the rejection of claim 16 under 35 U.S.C. §103.

### CONCLUSION

We have sustained the rejection of claims 1, 3-6, 8-10, 15, 16, 19, 20, 23, and 24 under 35 U.S.C. §103, but we have not sustained the rejection of claims 11 and 12 under 35 U.S.C. §103. Accordingly, the examiner's decision is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a) (1) (iv).

# **AFFIRMED-IN-PART**

JAMES D. THOMAS
Administrative Patent Judge

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Administrative Patent Judge

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Administrative Patent Judge

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Appeal No. 2004-2184 Application No. 09/545,316

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